

In re Appln. of: Shiuh-An Shieh

Appln. No.: 10/729,655

Filed: December 5, 2003

For: VEHICLE OCCUPANT

SENSING SYSTEM

Attorney Docket No: 11829/10

Examiner: Tai T. Nguyen

Art Unit: 2632

SECOND SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

In accordance with the duty of disclosure under 37 C.F.R. §1.56 and §§1.97-1.98, and more particularly in accordance with 37 C.F.R. §1.97(c), Applicant hereby cites the following reference(s):

No.	Date of Publication	Patentee/Applicant/Assignee
6,958,451 B2	10/25/2005	Breed et al.
6,950,022 B2	09/27/2005	Breed
6,942,248 B2	09/13/2005	Breed et al.
6,869,100 B2	03/22/2005	Breed et al.
6,850,824 B2	02/01/2005	Breed
6,833,516 B2	12/21/2004	Breed et al.
6,820,897 B2	11/23/2004	Breed et al.
6,805,404 B1	10/19/2004	Breed
6,793,242 B2	09/21/2004	Breed et al.
6,784,379 B2	08/31/2004	Breed et al.
6,782,316 B2	08/24/2004	Breed et al.
6,778,672 B2	08/17/2004	Breed et al.
6,757,602 B2	06/29/2004	Breed et al.
6,748,797 B2	06/15/2004	Breed et al.
6,746,078 B2	06/08/2004	Breed
6,738,697	05/18/2004	Breed
6,735,506 B2	05/11/2004	Breed et al.
6,712,387	03/30/2004	Breed et al.
6,689,962 B2	02/10/2004	Breed et al.
6,662,642 B2	12/16/2003	Breed et al.
6,653,577 B2	11/25/2003	Breed et al.
6,648,367 B2	11/18/2003	Breed et al.
6,555,766 B2	04/29/2003	Breed et al.
6,533,316 B2	03/18/2003	Breed et al.
6,529,809 B1	03/04/2003	Breed et al.
6,529,809 B1	03/04/2003	Breed et al.
6,513,833 B2	02/04/2003	Breed et al.
6,513,830 B2	02/04/2003	Breed et al.
US 2003/0001368 A1	01/02/2003	Breed et al.

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C 404 000 DO	44/40/2002	Doord -
6,484,080 B2	11/19/2002	Breed
6,474,683 B1	11/05/2002	Breet et al.
6,792,342 B2	09/14/2002	Breed et al.
6,445,988 B1	09/03/2002	Breed et al.
6,442,504 B1	08/27/2002	Breed et al.
6,422,595 B1	07/23/2002	Breed et al.
6,422,595 B1	07/23/2002	Breed et al.
US 2002/0089157 A1	07/11/2002	Breed et al.
6,412,813 B1	07/02/2002	Breed et al.
RE37,736	06/11/2002	Breed et al.
6,397,136 B1	05/28/2002	Breed et al.
6,397,135 B1	05/28/2002	Breed et al.
6,325,414 B2	12/04/2001	Breed et al.
6,326,704 B1	12/04/2001	Breed et al.
6,283,503 B1	09/04/2001	Breed et al.
6,270,116 B1	08/07/2001	Breed et al.
RE37,260 E	07/03/2001	Varga et al.
6,242,701 B1	06/05/2001	Breed et al.
6,186,537 B1	02/13/2001	Breed et al.
6,179,326 B1	01/30/2001	Breed et al.
6,175,787 B1	01/16/2001	Breed
6,168,198 B1	01/02/2001	Breed et al.
6,039,139	09/21/2000	Breed et al.
6,116,639	09/12/2000	Breed et al.
6,088,640	07/11/2000	Breed
6,081,757	06/27/2000	Breed et al.
6,078,854	06/20/2000	Breed et al.
6,043,743	03/28/2000	Saito et al.
6,039,139	02/21/2000	Breed et al.
6,020,812	02/01/2000	Thompson et al.
6,014,062	01/11/2000	Kithill et al.
6,012,007	01/04/2000	Fortune et al.
5,948,031	09/07/1999	Jinno et al.
5,943,295	08/24/1999	Varga et al.
5,914,610	06/22/1999	Gershenfeld et al.
5,901,978	05/11/1999	Breed et al.
5,878,620	03/09/1999	Gilbert et al.
5,848,802	12/15/1998	Breed et al.
5,844,415	12/01/1998	Gershenfeld et al.
5,829,782	11/03/1998	Breed et al.
5,829,782	10/13/1998	Breed et al.
5,809,437	09/15/1998	Breed et al.
	09/15/1998	Wiley et al.
5,808,552		
5,802,479	09/01/1998 06/30/1998	Kithil et al. Breed et al.
5,772,238		· · · · · · · · · · · · · · · · · · ·
5,770,997	06/23/1998	Kleinberg et al.
5,732,375	03/24/1998	Cashier
5,724,024	03/03/1998	Sonderegger et al.
5,691,693	11/25/1997	Kithil
5,653,462	08/05/1997	Breed et al.
5,607,180	03/04/1997	Kornhauser

	FOREIGN PATENT DOC	IIMENTS
3,943,376	03/09/1976	Long
4,625,329	11/25/1986	Ishikawa et al.
4,846,368	07/11/1989	Goetz
5,071,160	12/10/1991	White et al.
5,074,583	12/24/1991	Fujita et al.
5,118,134	06/02/1992	Mattes et al.
5,222,761	06/29/1993	Breed et al.
5,231,253	07/27/1993	Breed et al.
5,330,226	07/19/1994	Gentry et al.
5,404,128	04/04/1995	Ogino et al.
5,482,314	06/09/1996 Corrado et al.	
5,602,734	5,602,734 02/11/1997 Kithil	

FOREIGN PATENT DOCUMENTS

DOCUMENT NUMBER Number-Kind Code (if known)	DATE	COUNTRY
DE 38 02 159 A1	08/03/1989	Germany
DE 38 09 074 A1	10/05/1989	Germany

OTHER ART - NON PATENT LITERATURE DOCUMENTS

Breed, "A Smart Airbag System", 6th International Technical Conference on the Enhanced Safety of Vehicles (ESV), Windsor, Ontario, Canada, May 31- June 4, 1998

Breed et al, "A Critique of Single Point Sensing", SAE 920124, 12pp., International Congress & Exposition, February 24-28, 1992.

Ian V. Lau, John D. Horsch, David C. Viano and Dennis V. Andrzejak, "Mechanism of Injury from Air Bag Deployment Loads", pgs. 29-45, Accid. Anal. & Prev. Vol. 25, No. 1, 1993.

David S. Breed and Vittorio Castelli, "Trends in Sensing Frontal Impacts", 16pp., SAE Technical Paper Series, International Congress & Exposition, February 27 to March 3, 1989.

R. Paul Gorman and Terrence J. Sejowski, "Learned Classification of Sonar Targets Using a Massively Parellel Network", pgs. 1135-1140, IEEE Transactions on Acoustics Speech and Signal Processing, Vol. 36, No. 7, July 1998.

David S. Breed, Ph.D., "How Airbags Work (Design, Deployment Criteria, Costs, Perspectives)", 12pgs., Canadian Association of Road Safety Professionals International Conference on Airbags and Seatbelts: Evaluation and Implication for Public Safety, October 19-20, 1992.

R. Paul Gorman and Terrence J. Sejnowski, "Analysis of Hidden Units in a Layered Network Trained to Classify Sonar Targets", pgs. 75-89, Neutral Network, Vo. 1, 1988. Jan A. Olsson, Lars-Gunnar Skötte and Sven-Erik Svensson, "Air Bag System for Side Impact Protection", pgs. 976-983, Twelfth International Technical Conference on Experimental Saftety Vehicles, U.S. Department of Transportation, National Highway Traffic Safety Administration, Proceedings Vol. 2, May 29 to June 1, 1989.

Collision Safety Engineering, Proposal, Small Business Innovative Research, Crash Protection Accessories Using Inflated Structures, pgs. 6-23, May 1987.

Applicant is enclosing Form PTO-1449 (one sheet), along with a copy of each listed reference for which a copy is required under 37 C.F.R. §1.98(a)(2). As each of the listed references is in English or an English abstract is provided, no further

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commentary is believed to be necessary, 37 C.F.R §1.98(a)(3). Applicant respectfully requests the Examiner's consideration of the above reference(s) and entry thereof into the record of this application.

By submitting this Statement, Applicant is attempting to fully comply with the duty of candor and good faith mandated by 37 C.F.R. §1.56. As such, this Statement is not intended to constitute an admission that any of the enclosed references, or other information referred to therein, constitutes "prior art" or is otherwise "material to patentability," as that phrase is defined in 37 C.F.R. §1.56(a).

Applicant has calculated a processing fee in the amount of \$180.00 to be due under 37 C.F.R. §1.17(p) in connection with the filing of this Statement. Applicant has enclosed a check covering this fee, or authorized charging the fee to a deposit account or credit card, as indicated in the Transmittal accompanying this Statement.

Respectfully submitted,

June 7, 2006

Date

John F. Nethery

(Reg. No. 42,928)



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FORM PTO-1449 \3	SERIAL NO.	CASE NO.
The make the state of the state	10/729,655	11829/10
LIST OF PATENTS AND PUBLICATIONS FOR	FILING DATE	GROUP ART UNIT
APPLICANT'S INFORMATION DISCLOSURE	December 5, 2003	2632
STATEMENT		
(use several sheets if necessary)	APPLICANT(S): SHIUH-AN SHI	EH

REFERENCE DESIGNATION U.S. PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER Number-Kind Code (if known)	DATE	NAME	CLASS/ SUBCLASS	FILING DATE
	C1	6,958,451 B2	10/25/2005	Breed et al.		
	C2	6,950,022 B2	09/27/2005	Breed		
,	C3	6,942,248 B2	09/13/2005	Breed et al.		
	C4	6,869,100 B2	03/22/2005	Breed et al.		
	C5	6,850,824 B2	02/01/2005	Breed		
	C6	6,833,516 B2	12/21/2004	Breed et al.		
	C7	6,820,897 B2	11/23/2004	Breed et al.		
	C8	6,805,404 B1	10/19/2004	Breed		
	C9	6,793,242 B2	09/21/2004	Breed et al.		
	C10	6,784,379 B2	08/31/2004	Breed et al.		
-	C11	6,782,316 B2	08/24/2004	Breed et al.		-
	C12	6,778,672 B2	08/17/2004	Breed et al.		
	C13	6,757,602 B2	06/29/2004	Breed et al.		
	C14	6,748,797 B2	06/15/2004	Breed et al.		
	C15	6,746,078 B2	06/08/2004	Breed		
	C16	6,738,697	05/18/2004	Breed		
	C17	6,735,506 B2	05/11/2004	Breed et al.		
	C18	6,712,387	03/30/2004	Breed et al.		
	C19	6,689,962 B2	02/10/2004	Breed et al.		
	C20	6,662,642 B2	12/16/2003	Breed et al.		
	C21	6,653,577 B2	11/25/2003	Breed et al.		
	C22	6,648,367 B2	11/18/2003	Breed et al.		
	C23	6,555,766 B2	04/29/2003	Breed et al.		
	C24	6,533,316 B2	03/18/2003	Breed et al.		
	C25	6,529,809 B1	03/04/2003	Breed et al.		
	C26	6,529,809 B1	03/04/2003	Breed et al.		
	C27	6,513,833 B2	02/04/2003	Breed et al.		
	C28	6,513,830 B2	02/04/2003	Breed et al.		-
	C29	US 2003/0001368 A1	01/02/2003	Breed et al.		
	C30	6,484,080 B2	11/19/2002	Breed		
	C31	6,474,683 B1	11/05/2002	Breet et al.		•
·	C32	6,792,342 B2	09/14/2002	Breed et al.		
	C33	6,445,988 B1	09/03/2002	Breed et al.		******
	C34	6,442,504 B1	08/27/2002	Breed et al.		
	C35	6,422,595 B1	07/23/2002	Breed et al.		
	C36	6,422,595 B1	07/23/2002	Breed et al.		
	C37	US 2002/0089157 A1	07/11/2002	Breed et al.	+	

EXAMINER DATE CONSIDERED

FORM PTO-1449	SERIAL NO.	CASE NO.
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U.S. PATENT DOCUMENTS

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	C38	6,412,813 B1	07/02/2002	Breed et al.		
	C39	RE37,736	06/11/2002	Breed et al.		
	C40	6,397,136 B1	05/28/2002	Breed et al.		
	C41	6,397,135 B1	05/28/2002	Breed et al.		
	C42	6,325,414 B2	12/04/2001	Breed et al.		
	C43	6,326,704 B1	12/04/2001	Breed et al.		
•	C44	6,283,503 B1	09/04/2001	Breed et al.		
	C45	6,270,116 B1	08/07/2001	Breed et al.		
	C46	RE37,260 E	07/03/2001	Varga et al.	1	-
	C47	6,242,701 B1	06/05/2001	Breed et al.		
	C48	6,186,537 B1	02/13/2001	Breed et al.		
	C49	6,179,326 B1	01/30/2001	Breed et al.	1	
	C50	6,175,787 B1	01/16/2001	Breed		
	C51	6,168,198 B1	01/02/2001	Breed et al.		
	C52	6,039,139	09/21/2000	Breed et al.		-
	C53	6,116,639	09/12/2000	Breed et al.	1	
	C54	6,088,640	07/11/2000	Breed		
	C55	6,081,757	06/27/2000	Breed et al.		
	C56	6,078,854	06/20/2000	Breed et al.		
	C57	6,043,743	03/28/2000	Saito et al.	1	
	C58	6,039,139	02/21/2000	Breed et al.		
	C59	6,020,812	02/01/2000	Thompson et al.		
	C60	6,014,062	01/11/2000	Kithill et al.		
	C61	6,012,007	01/04/2000	Fortune et al.		
	C62	5,948,031	09/07/1999	Jinno et al.		
	C63	5,943,295	08/24/1999	Varga et al.		
	C64	5,914,610	06/22/1999	Gershenfeld et al.		
	C65	5,901,978	05/11/1999	Breed et al.	1	
	C66	5,878,620	03/09/1999	Gilbert et al.		
	C67	5,848,802	12/15/1998	Breed et al.	1	
	C68	5,844,415	12/01/1998	Gershenfeld et al.		
	C69	5,829,782	11/03/1998	Breed et al.		
	C70	5,822,707	10/13/1998	Breed et al.	1	
	C71	5,809,437	09/15/1998	Breed		
	C72	5,808,552	09/15/1998	Wiley et al.	1	* ***
	C73	5,802,479	09/01/1998	Kithil et al.	+	
	C74	5,772,238	06/30/1998	Breed et al.	1	
	C75	5,770,997	06/23/1998	Kleinberg et al.	1	
	C76	5,732,375	03/24/1998	Cashier		

EXAMINER DATE CONSIDERED

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U.S. PATENT DOCUMENTS

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	C77	5,724,024	03/03/1998	Sonderegger et al.		_
	C78	5,691,693	11/25/1997	Kithil		
	C79	5,653,462	08/05/1997	Breed et al.		
	C80	5,607,180	03/04/1997	Kornhauser		
	C81	5,602,734	02/11/1997	Kithil		
	C82	5,482,314	06/09/1996	Corrado et al.		
	C83	5,404,128	04/04/1995	Ogino et al.		
	C84	5,330,226	07/19/1994	Gentry et al.		
	C85	5,231,253	07/27/1993	Breed et al.		
	C86	5,222,761	06/29/1993	Breed et al.		
	C87	5,118,134	06/02/1992	Mattes et al.		
	C88	5,074,583	12/24/1991	Fujita et al.		
	C89	5,071,160	12/10/1991	White et al.		
	C90	4,846,368	07/11/1989	Goetz		
	C91	4,625,329	11/25/1986	Ishikawa et al.		
	C92	3,943,376	03/09/1976	Long		

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL		DOCUMENT NUMBER Number-Kind Code (if known)	DATE	COUNTRY	CLASS/ SUBCLASS	TRANSLATION YES OR NO
	C93	DE 38 02 159 A1	08/03/1989	Germany		Abstract
,	C94	DE 3809074 A1	10/05/1989	Germany		Abstract

EXAMINER				
INITIAL		OTHER ART – NON PATENT LITERATURE DOCUMENTS		
		e name of author, title of the article (when appropriate), title of the item (book, magazine, journal, serial, sium, catalog, etc.), date page(s), volume-issue number(s), publisher, city and/or country where published.		
	C95	Breed, "A Smart Airbag System", 6th International Technical Conference on the Enhanced		
		Safety of Vehicles (ESV), Windsor, Ontario, Canada, May 31- June 4, 1998		
	C96 Breed et al, "A Critique of Single Point Sensing", SAE 920124, 12pp., International Congress & Exposition, February 24-28, 1992.			
	C97	Ian V. Lau, John D. Horsch, David C. Viano and Dennis V. Andrzejak, "Mechanism of Injury from Air Bag Deployment Loads", pgs. 29-45, Accid. Anal. & Prev. Vol. 25, No. 1, 1993.		
	C98	David S. Breed and Vittorio Castelli, "Trends in Sensing Frontal Impacts", 16pp., SAE Technical Paper Series, International Congress & Exposition, February 27 to March 3, 1989.		
	C99	R. Paul Gorman and Terrence J. Sejowski, "Learned Classification of Sonar Targets Using a Massively Parellel Network", pgs. 1135-1140, IEEE Transactions on Acoustics Speech and Signal Processing, Vol. 36, No. 7, July 1998.		

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•	10/729,655	11829/10
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APPLICANT'S INFORMATION DISCLOSURE	December 5, 2003	2632
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(use several sheets if necessary)	APPLICANT(S): SHIUH-AN SHI	EH

EXAMINER INITIAL	OTHER ART – NON PATENT LITERATURE DOCUMENTS (Include name of author, title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date page(s), volume-issue number(s), publisher, city and/or country where published.	
	C100	
	C101	R. Paul Gorman and Terrence J. Sejnowski, "Analysis of Hidden Units in a Layered Network Trained to Classify Sonar Targets", pgs. 75-89, Neutral Network, Vo. 1, 1988.
	C102	Jan A. Olsson, Lars-Gunnar Skötte and Sven-Erik Svensson, "Air Bag System for Side Impact Protection", pgs. 976-983, Twelfth International Technical Conference on Experimental Saftety Vehicles, U.S. Department of Transportation, National Highway Traffic Safety Administration, Proceedings Vol. 2, May 29 to June 1, 1989.
	C103	Collision Safety Engineering, Proposal, Small Business Innovative Research, Crash Protection Accessories Using Inflated Structures, pgs. 6-23, May 1987.

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I EXAMINER	DATE CONSIDERED